

GOVERNMENT OF ANDHRA PRADESH  
ABSTRACT

IT & C Department - e-Governance - Management of IT Standards - Databases and Data Elements - Standardization and approval for identified 45 generic elements - codification methodology, structure and ownership- Orders – Issued

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INFORMATION TECHNOLOGY & COMMUNICATIONS DEPARTMENT  
(e-Governance wing)

G.O. Ms. No. 6

Dated:13.02.2009  
Read the following:

1. GO MS 40, IT&C Dept. dated: 14.8.2001
2. G.O. Ms. No. 13, IT&C Dept. Dated 23-07-2003
3. GO Rt NO. 17, IT&C Dept. dated: 30.01.2004
4. GO Rt. No. 223, IT&C Dept. Dated: 6.07.2004
5. GO Rt. No.245, IT&C Dept. Dated: 27.07.2004
6. G.O Ms. No.5, IT&C Dept. Dated.23.02.2005
7. G.O.Rt.No.208, IT&C Dept. Dated: 21.06.2005
8. G.O. Ms. No.4, IT&C Dept. Dated 23.02.2008
9. Minute of the **State Apex Body** meeting held on 23.01.2009

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**ORDER:**

Government of Andhra Pradesh took up standardization of data elements to use across the Government Department to enable easier and effective exchange and processing of data and also to remove ambiguities and inconsistencies in data usage. Based on identification and finalization of standardized data elements, the XML schemas will be developed and on top of it, service Application Programme Interfaces (APIs) will be defined which will be useful for developing the Software applications for Govt. departments. The standards will help in reusability and further makes change management an easy task.

2. IT&C department assigned the job to CGG for identification and finalization of standardized data elements and to take up the following works:
  - a. **Data creation:** To collect the data from the respective departments and create the content for the identified data elements.
  - b. **Codification of the data/ elements:** The data collected to be codified to the best of standards to enforce the interoperability with ease by the user departments.
  - c. **Creation of the schema:** Creation of schema for each element.
  - d. **Maintenance of Standards:** Development of appropriate application for management of Standards (Addition, Modification, Deletion by appropriate authority) and publication in public domain.

3. CGG as part of this assignment conducted workshop with respective departments and visited various Government office concerned and submitted its report to IT&C department.
4. The identified data elements were put before the State Apex Body as per the GO Rt. No 17 dated 30.01.2004 of IT&C Department, for approval of :
  - a. Ownership by departments for identified 45 generic elements consisting of 24 generic elements with controlled data and 21 generic elements without controlled data
  - b. Codification methodology, structure to be adopted for generic elements and schemas for management and implementing these standards.
5. State Apex Body approved the ownership for 21 data element without controlled data as follows:

Sno	Element	Approved Owner Dept
1	Age	IT&C department
2	Amount	-do-
3	Organization_Name	-do-
4	Date	-do-
5	Education	-do-
6	Email_id	-do-
7	Financial_Year	-do-
8	Occupation	-do-
9	Period_Duration	-do-
10	Person_Name	-do-
11	First_Name	-do-
12	Last_Name	-do-
13	Middle_Name	-do-
14	Pincode	-do-
15	Telephone_Number	-do-
16	Title	-do-
17	Calender_Year	-do-
18	Simple_Address	-do-
19	State_Address	-do-
20	International_address	-do-
21	Quantity	-do-

- A. The Apex Body suggested that date field should also be in alpha numeric format like January 23, 2009 in addition to the existing Indian format 23.01.2009
- B. It also suggested that the Middle name should be optional, First Name (Given name) and Last name (Surname, House Name) should be mandatory.

6. State Apex Body approved ownership for the 24 generic Elements with controlled data as follows:

Sno	Element	Approved Owner Dept
1	Caste Name (SC)	Social Welfare Dept
2	Caste_Category (SC)	Social Welfare Dept
3	Caste Name (ST)	Tribal Welfare Dept
4	Caste_Category (ST)	Tribal Welfare Dept
5	Caste Name (BC)	BC Welfare Dept
6	Caste_Category (BC)	BC Welfare Dept
7	Department Name	GAD
8	Head_of_Department	GAD
9	Language	GAD
10	Gender	GAD
11	Religion	GAD
12	State Name	GAD
13	Marital_Status	GAD
14	Economic_Status	Planning Department
15	House_Hold_Category	Planning Department
16	Designation	Finance Department
17	Organization_Type	Finance Department
18	Payment_Mode	Finance Department
19	District Name	Revenue Department
20	Mandal Name	Revenue Department
21	Village Name	Revenue Department
22	Education_Institution_Type	Education Department
23	General_Education_Level	Education Department
24	Unit_of_Measurement	Consumer affairs, Food and Civil Supplies Dept.

7. **Data Codification:** It is this code that ensures interoperability among diverse applications. The codification methodology adopted is aimed at providing the following features.

- a. The code should be independent of parent element code: (Ex the village code

should not contain the code of Mandal or District). This model is adopted to make the codes independent, so that there will not be any need to change codes even in case of any realignment or change of jurisdiction.

- b. Dual coding (Alphabetical & Numerical) is suggested for some elements so that the IVRS system can also be used.
- c. Depending upon the expected data (number of items) the length of code i.e, single digit/character to four digits/characters is adopted.
- d. Depending upon the type and volume of controlled data, code generation for some of the elements is manual and for some elements automatic generation (auto). This approach is specified in the schema. Approved codification methodology is as follows:

<b>SNo.</b>	<b>Element</b>	<b>Codification Methodology</b>
1.	Caste Name	Numeric 4 digits Auto
2.	Caste_Category	Alpha Min:2 Char Max:3 Char Manual
3.	Department Name	Alpha Min:2 Char Max:4 Char Manual
4.	Designation	Numeric 4 digits Auto
5.	District Name	Numeric/Alpha 3 Char/3 digits Auto
6.	Economic_Status	Alpha 3 Char Manual
7.	Education_Institution_Type	Alpha Min:2 Char Max:4 Char Manual
8.	Gender	Alpha 1 Char Manual
9.	General_Education_Level	Alpha Min:2 Char Max:4 Char Manual

10.	Head_of_department	Alpha Min:2 Char Max:4 Char Manual
11.	House_hold_category	Alpha 1 Char Manual
12.	Language	Alpha 3 Char Manual
13.	Mandal Name	Alpha 4 Char Manual
14.	Marital_Status	Alpha 1 Char Manual
15.	Organization_Type	Numeric/Alpha 3 digits/ Min:2 Char Max:4 Char Manual
16.	Payment_Mode	Alpha Min:2 Char Max:3 Char Manual
17.	Religion	Alpha 4 Char Manual
18.	State Name	Alpha 2 Char Manual
19.	Unit_of_Measurement	Alpha Min 1 Char Max 5 Char
20.	Village Name	Alpha 4 Char Manual

8. **Maintenance of Standards:** A web interface for maintenance of standards is developed by CGG. The application will be hosted in the [www.apit.gov.in](http://www.apit.gov.in) domain and privileges to access and edit different information is given based on the ownership and roles of the user.

- a. Website will be under the control of IT&C department.
- b. All data elements will be hosted on Website by IT&C department.

- c. Chief Information Officer (CIO) or any other officer designated in the department responsible for IT implementation, of Data Element Ownership department will be responsible for recommending addition, modification and deletion of controlled data for the elements, apart from ensuring implementation of data standards in the IT Applications implemented by the respective department.
  - d. CIO or the officer designated in the department, on written approval of Spl. Chief Secretary/Principal Secretary/Secretary concerned will forward the proposal to IT&C Department for necessary changes in Data Elements and hosting on Website.
9. This order shall come into force with immediate effect and shall be followed strictly by all the Government departments, PSUs, Institutions and Local bodies while implementing IT projects.
10. These standards and guidelines will be reviewed / appended every year or more frequently as required to ensure continued conformance to global standards.
11. Standards and guidelines relating to IT architecture are made available on the web at [www.apit.gov.in](http://www.apit.gov.in).
12. A copy of this order is available on the Government Website [www.apgov.in/goir](http://www.apgov.in/goir)

(BR ORDER AND IN HE NAME OF HE GOVERNOR OF ANDHRA PRADESH)

P. RAMAKANTH REDDY  
CHIEF SECRETARY TO GOVERNMENT

To

- 1. All Members of the Committee
- 2. The Accountant General (Audit), Hyderabad.
- 3. The Accountant General (A&E), Hyderabad.
- 4. The Director of Treasuries and Account, Hyderabad.
- 5. The Pay and Accounts Officer, A.P. Hyderabad.
- 6. All Spl. Chief Secretaries/ Prl. Secretaries/ Secretaries
- 7. All Heads of Departments / Heads of the corporations / Heads of the societies
- 6. The Dy, PAO, Secretariat branch, Hyderabad
- 7. Copy to PS to CS, Secretaries as above/ SF/Spare

Copy to

PS to Secretary (I), IT&C Dept.

PS to Secretary (II), IT&C Dept.

SC/SF

// FORWARDED BY ORDER//

SECTION OFFICER